## WHAT IS CLAIMED IS

refinement.

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- 1. A composition for topical application comprising products of hydrolysis of organic materials, said organic materials further comprising at least 6 weight percent unsaponifiable materials.
- The composition of claim 1 wherein said organic materials were pre-treated prior to
  hydrolysis, said pre-treatment selected from the group of treatments consisting of
  alkoxylation, polymerization, acetylation, oxidation, reduction, concentration, hydrogenation,
  partial hydrogenation, interesterification, double bond modification, randomization, and
  - 3. The composition of claim 2 wherein said bre-treated organic materials further comprises extracts selected from the group consisting of amaranth seed oil, anise seed oil, avocado seed oil, barley oil, briza oil, buck wheat oil, candelilla wax, carnuba wax, cassia occidentalis oil, coffee bean oil, deoiled lecithin, dog fish oil, esparto wax, oils from fungi and other microorganisms, guayule plant extract, jojoba oil, jurinea oil, lanolin, laurel berry oil, olestra (olean), olive oil concentrate (phytosqualene), olive seed oil, orange roughy oil, ouricury wax, quinoa seed oil, rye germ oil, shark liver oil, shea butter, sperm whale oil, sugar cane wax, sunflower wax, tall oil, tall oil distillate, Vegepure from wheat grains, and wheat germ oil.
  - 4. The composition of claim 1 comprising at least 20% by weight of unsaponifiables.

- 1 5. The composition of claim 2 comprising at least 20% by weight of unsaponifiables.
- 1 6. A substantive composition comprising the composition of claim 1 in combination with at
- 2 least one ingredient selected from the group consisting of emollients, conditioners, pigments,
- dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
- 4 repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants,
- 5 fragrances, and hormones.

- 7. A substantive composition comprising the composition of claim 2 in combination with at least one ingredient selected from the group consisting of emollients, conditioners, pigments, dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants, fragrances, and hormones.
- 8. A substantive composition comprising the composition of claim 4 in combination with at
- 2 least one ingredient selected from the group consisting of emollients, conditioners, pigments,
- 3 dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
- 4 repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants,
- 5 fragrances, and hormones.
- 9. A substantive composition comprising the composition of claim 5 in combination with at
- 2 least one ingredient selected from the group consisting of emollients, conditioners, pigments,

- dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
- 4 repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants,
- 5 fragrances, and hormones.
- 1 10. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 1 to the hair, skin, scales, or feathers of an animal subject.
- 1 11. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 2 to the hair, skin, scales, or feathers of an animal subject.
  - 12. A method of providing substantive benefits to an animal subject comprising applying the composition of claim 6 to the hair, skin, scales, or feathers of an animal subject.
  - 13. A method of providing substantive benefits to an animal subject comprising applying the composition of claim 7 to the hair, skin, scales, or feathers of an animal subject.
- 1 14. A method of providing substantive benefits to a botanical subject comprising applying the composition of claim 1 to the surface of the botanical subject.
- 1 15. A method of providing substantive benefits to a botanical subject comprising applying the
- 2 composition of claim 2 to the surface of the botanical subject.
- 1 16. A method of providing substantive benefits to a botanical subject comprising applying the
- 2 composition of claim 6 to the surface of the botanical subject.

- 1 17. A method of providing substantive benefits to a botanical subject comprising applying the
- 2 composition of claim 7 to the surface of the botanical subject.
- 1 18. A method of providing substantive benefits to an inanimate object comprising applying the
- 2 composition of claim 1 to the surface of the inanimate object.
- 1 19. A method of providing substantive benefits to an inanimate object comprising applying the
- 2 composition of claim 2 to the surface of the inanimate object.
  - 20. A method of providing substantive benefits to an inanimate object comprising applying the composition of claim 6 to the surface of the inanimate object.
  - 21. A method of providing substantive benefits to an inanimate object comprising applying the composition of claim 7 to the surface of the inanimate object.
  - 22. A composition for topical application comprising products of hydrolysis of organic materials, said organic materials further comprising at least 6 weight percent long carbon chain materials, said long carbon chain materials having at least 18 carbons in length.
- 1 23. The composition of claim 22 wherein said organic materials were pre-treated prior to
- 2 hydrolysis, said pre-treatment selected from the group of treatments consisting of
- 3 alkoxylation, polymerization, acetylation, oxidation, reduction, concentration, hydrogenation,
- 4 partial hydrogenation, interesterification, double bond modification, randomization, and

- 24. The composition of claim 23 wherein said pre-treated organic materials further comprises 1 2 extracts selected from the group consisting of amaranth seed oil, anise seed oil, avocado seed oil, barley oil, briza oil, buck wheat oil, candelilla wax, carnuba wax, cassia occidentalis oil, 3 coffee bean oil, deoiled lecithin, dog fish oil, esparto wax, oils from fungi and other 4 5 microorganisms, guayule plant extract, jojoba oil, jurinea oil, lanolin, laurel berry oil, olestra (olean), olive oil concentrate (phytosqualene), olive seed oil, orange roughy oil, ouricury 6 wax, quinoa seed oil, rye germ oil, shark liver oil, shea butter, sperm whale oil, sugar cane wax, sunflower wax, tall oil, tall oil distillate, Vegepure from wheat grains, and wheat germ oil.
  - 25. The composition of claim 22 comprising at least 20% by weight of unsaponifiables.
  - 26. The composition of claim 23 comprising at least 20% by weight of unsaponifiables.
  - 27. A substantive composition comprising the composition of claim 22 in combination with at 1
  - 2 least one ingredient selected from the group consisting of emollients, conditioners, pigments,
  - 3 dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
  - repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants, 4
  - 5 fragrances, and hormones.
  - 28. A substantive composition comprising the composition of claim 23 in combination with at 1





- dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
- 4 repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants,
- fragrances, and hormones.
- 1 29. A substantive composition comprising the composition of claim 25 in combination with at
- least one ingredient selected from the group consisting of emollients, conditioners, pigments,
- dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect
- 4 repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants,
  - fragrances, and hormones.
    - 30. A substantive composition comprising the composition of claim 26 in combination with at least one ingredient selected from the group consisting of emollients, conditioners, pigments, dyes, pharmaceuticals, ultraviolet radiation absorbers, physical radiation blocks, insect repellants, animal repellants, insecticides, pesticides, herbicides, animal attractants, fragrances, and hormones.
- 1 31. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 22 to the hair, skin, scales, or feathers of an animal subject.
- 1 32. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 23 to the hair, skin, scales, or feathers of an animal subject.

- 1 33. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 27 to the hair, skin, scales, or feathers of an animal subject.
- 1 34. A method of providing substantive benefits to an animal subject comprising applying the
- 2 composition of claim 28 to the hair, skin, scales, or feathers of an animal subject.
- 1 35. A method of providing substantive benefits to a botanical subject comprising applying the
- 2 composition of claim 22 to the surface of the botanical subject.
  - 36. A method of providing substantive benefits to a botanical subject comprising applying the composition of claim 23 to the surface of the botanical subject.
  - 37. A method of providing substantive benefits to a botanical subject comprising applying the composition of claim 27 to the surface of the botanical subject.
  - 38. A method of providing substantive benefits to a botanical subject comprising applying the composition of claim 28 to the surface of the botanical subject.
- 1 39. A method of providing substantive benefits to an inanimate object comprising applying the
- 2 composition of claim 22 to the surface of the inanimate object.
- 1 40. A method of providing substantive benefits to an inanimate object comprising applying the
- 2 composition of claim 23 to the surface of the inanimate object.

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- 1 41. A method of providing substantive benefits to an inanimate object comprising applying the composition of claim 27 to the surface of the inanimate object.
- 42. A method of providing substantive benefits to an inanimate object comprising applying the composition of claim 28 to the surface of the inanimate object.
- 43. A sunscreen composition for topical application comprising physical radiation blocking agents, radiation absorbing agents, and hydrolysis products of organic materials, said organic materials further comprising at least 6 weight percent unsaponifiable materials.
  - 44. The composition of claim 43 wherein said organic materials were pre-treated prior to hydrolysis, said pre-treatment selected from the group of treatments consisting of alkoxylation, polymerization, acetylation, oxidation, reduction, concentration, hydrogenation, partial hydrogenation, interesterification, double bond modification, randomization, and refinement.
  - 45. The composition of claim 44 wherein said pre-treated organic materials further comprises extracts selected from the group consisting of amaranth seed oil, anise seed oil, avocado seed oil, barley oil, briza oil, buck wheat oil, candelilla wax, carnuba wax, cassia occidentalis oil, coffee bean oil, deoiled lecithin, dog fish oil, esparto wax, oils from fungi and other microorganisms, guayule plant extract, jojoba oil, jurinea oil, lanolin, laurel berry oil, olestra (olean), olive oil concentrate (phytosqualene), olive seed oil, orange roughy oil, ouricury





- wax, quinoa seed oil, rye germ oil, shark liver oil, shea butter, sperm whale oil, sugar cane
- 8 wax, sunflower wax, tall oil, tall oil distillate, Vegepure from wheat grains, and wheat germ
- 9 oil.
- 1 46. The composition of claim 43 comprising at least 20% by weight of unsaponifiables.
- 1 47. The composition of claim 44 comprising at least 20% by weight of unsaponifiables.